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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,269	03/10/2004	Hisao Arai	Q80047	2375

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2100 PENNSYLVANIA AVE. NW
WASHINGTON, DC 20037-3213

EXAMINER	
DHARIA, PRABODH M	
ART UNIT	PAPER NUMBER
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/19/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/796,269	ARAI, HISAO	
	Examiner	Art Unit	
	Prabodh M. Dharia	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03-10-04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

2. **Status:** Please addressed all the replies and correspondence to the new examiner art unit 2629.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 03-10-2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

Drawings

4. Figure 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 and 7-10 rejected under 35 U.S.C. 102(b) as being anticipated by Tagusa et al. (JP 2000-029019).

Regarding Claim 1, Tagusa et al. teaches a pixel defect (shorting , optical leakage and open circuit) correcting method for image display (detailed description pages 6 and 7, paragraphs 45-48), the method comprising: equipping a refractive index varying area (detailed description pages 6 paragraphs 45-47), which is different in refractive index from the surroundings thereof in a plane parallel to an image display face, on a defective pixel on the image display face (detailed description pages 6 and 7, paragraphs 45-48).

Regarding Claim 2, Tagusa et al. teaches pixel defect correcting method for image display (detailed description pages 6 and 7, paragraphs 45-48), the method comprising: equipping a pixel defect correcting film on an image display face (detailed description pages 6 and 7, paragraphs 45-52); and equipping a refractive index varying area (detailed description pages 6 and 7, paragraphs 45-48), which is different in refractive index from the surroundings thereof in a plane parallel to the image display face (detailed description pages 6, paragraphs

45,46), to a portion of the pixel defect correcting film which is located above a defective pixel (detailed description pages 6-8, paragraphs 45-61).

Regarding Claim 3, Tagusa et al. teaches a pixel defect correcting method for image display(detailed description pages 6 and 7, paragraphs 45-48),, the method comprising: attaching an image defect correcting film having a refractive index varying area (detailed description pages 6-8, paragraphs 45-61), which is different in refractive index from the surroundings thereof in a plane parallel to a film face (detailed description page 6, paragraphs 45-47), onto an image display face so that the refractive index varying area is located above a defective pixel (detailed description pages 6-9, paragraphs 45-62).

Regarding Claims 7-10, Tagusa et al. teaches an image display device, wherein a defective pixel of image display is substantially corrected by a refractive index varying area on an image display face which is different in refractive index from the surroundings thereof in a plane parallel to the image display face (detailed description pages 6 and 7, paragraphs 45-48); an image display device comprising: a refractive index varying area which is different in refractive index from the surroundings thereof in a plane parallel to an image display face, the refractive index varying area being equipped above a defective pixel of the image display face (detailed description pages 6 and 7, paragraphs 45-48); an image display device comprising: a pixel defect correcting film having a refractive index varying area, which is different in refractive index from the surroundings thereof in a plane parallel to an image display face, on the image display face, the refractive index varying area being located above a defective pixel of the

image display face (detailed description pages 6 and 7, paragraphs 45-48) and the pixel defect correcting film comprises photochromic material (pages 11 and 12, paragraph 83, detailed description pages 6-9, paragraphs 45-62).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 4-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Tagusa et al. (JP 2000-029019) as applied to claims 1-3and 7-10 above, and further in view of Ubusawa et al. (JP 03140903A).

Regarding Claims 4-6 Tagusa et al. teaches the refractive index is varied by irradiating a UV rays to thereby equip the refractive index varying area (detailed description pages 6-8, paragraphs 45-61, page 15, paragraphs 115-117); However, Tagusa et al. fails to recite the refractive index is varied by irradiating a laser beam to thereby equip the refractive index varying area. However, Ubusawa et al. the refractive index is varied by irradiating a laser beam to thereby equip the refractive index varying area and (see constitution).

The reason to combine the color filter using photosensitive resin film has the excellent grade therefore display the good and bright colors (see constitution).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Ubusawa et al. in the teaching of Yamada to be able to have beam to thereby equip the refractive index varying area (see constitution). The reason to combine the color filter using photosensitive resin film has the excellent grade therefore display the good and bright colors facilitates to the larger area and has excellent mass productivity (see Constitution).

9. Claims 11and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 2003/0128309 A1) in view of Helstern et al. (5,743,629).

Regarding Claims 11 and 14 Yamada teaches a color mura (Mura phenomenon is a non-uniform color difference and also forming light leakage area per prior art of Liu et al. (US 6,771,345 B2) see Col. 2, Lines 9-11) correcting (page 1, paragraph 2), method comprising: equipping a color mura correcting film (spacer film figure 5a, Item # 180, page 2, paragraphs 16,29) is equipped to an image display portion of an image display (page 2, paragraphs 16,18,19); and correcting a color mura of a display image by the color mura correcting film (page 2, paragraphs 16,18,19,29).

Yamada teaches mura color defect; however, Yamada fials to recite or disclose color correcting film generates complementary color. However, Helstern et al. discloses color correcting film (Col. 5, Lines 10,11, Col. 3, Lines 16-23,30-46 figure 3, item # 22 generates complementary color (Col. 3, Lines 16-23, Lines 10-15 combines complementary color with

main color to form a white light; i.e. to have uniform colors); generates the complementary color through light interference, (Col. 3, Lines 16-23, 36-47, Col. 1, Line 64 to Col. 2, Line 6).

The reason to combine is to be able to produce a uniform color display and reduce non uniform color differences.

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Helstern et al. in the teaching of Yamada to be able to have a display where complementary color generating film colors are combined with light illuminating device color to produce a white light and further producing uniform color and reducing non-uniformity of color so that display displaying image with uniform color (Col. 2, Lines 35-47).

10. Claims12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 2003/0128309 A1) in view of Helstern et al. (5,743,629) as applied to claims 11 and 14 above, and further in view of Ubusawa et al. (JP 03140903A).

Regarding Claims 12,13 and 15 Yamada modified by Helstern et al. fails to disclose a refractive index varying structure which is periodically varied in refractive index and generates image through light interference and the refractive index varying structure is equipped by irradiation of a laser beam. However, Ubusawa et al. discloses a refractive index varying structure which is periodically varied in refractive index and generates image through light interference and the refractive index varying structure is equipped by irradiation of a laser beam (see constitution).

The reason to combine the color filter using photosensitive resin film has the excellent grade therefore display the good and bright colors (see constitution).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Ubusawa et al. in the teaching of Yamada modified by Helstern et al. to be able to have beam to thereby equip the refractive index varying area (see constitution). The reason to combine the color filter using photosensitive resin film has the excellent grade therefore display the good and bright colors facilitates to the larger area and has excellent mass productivity (see Constitution).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hoo Ken Koo (JP 10-062734) Method of correcting defective pixel of liquid crystal display and defective pixel correction device.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M. Dharia whose telephone number is 571-272-7668. The examiner can normally be reached on M-F 8AM to 5PM.

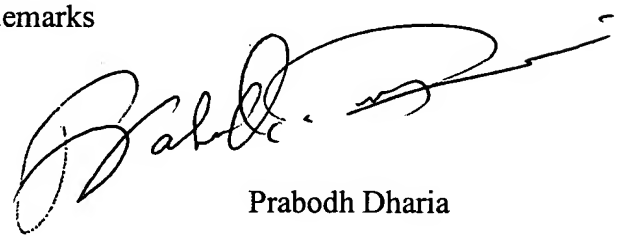
13. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231



Prabodh Dharia

Partial Program Signatory Authority

AU2629

December 10, 2006